



University Sciences Building

Northeastern U.S.

THESIS PRESENTATION OUTLINE

Justin Green - CM

I. INTRODUCTION (3 screens)

- a. Self
- b. Project
- c. Outline of Presentation / Topics

II. PROJECT BACKGROUND (2 screens)

- a. Building Type / Function
- b. General Statistics
 - i. *Contract Type*
 - ii. *Cost*
 - iii. *Schedule*
 - iv. *Systems*

III. ANALYSIS #1: BIM Implementation (9 screens)

- a. Problem Identification / Research Goal
- b. The Value of BIM
- c. BIM Execution Plan
- d. Ways to pay for BIM
 - i. *Building System Analysis*
 - ii. *Digital Fabrication*
 - iii. *Three Dimensional coordination*
- e. Creating a BIM Model
- f. Conclusions and Recommendations

IV. ANALYSIS #2: Solar Photovoltaic System Design (9 screens)

- a. Problem Identification / Research Goal
- b. PV Array Design
 - i. *Product Selection*
 - ii. *Orientation and Shading*
 - iii. *System Sizing and Layout*
- c. Electrical Breadth (3 screens)
 - i. *Energy Production*
 - ii. *Electrical Components and System Tie-in*
 - iii. *Results*
- d. Feasibility Analysis
 - i. *System Cost*
 - ii. *Rebates and Incentives*
 - iii. *Payback Period*
- e. Conclusions and Recommendations



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V. Rainwater Collection (15 screens)

- a. Problem Identification / Research Goal
- b. Collection System Design
 - i. *Potential Gallons Harvester*
 - ii. *Estimated Water Usage*
 - iii. *Location and Sizing of Storage Tanks*
 - iv. *Waterless Urinal Savings*
- c. Structural Breadth (3 screens) --- *[Optional Depending on Time]*
 - i. *Impact to Structure*
 - ii. *Sizing of Beams / Columns*
- d. Feasibility Analysis
 - i. *System Cost*
 - ii. *Payback Period*
- e. Conclusions and Recommendations

VI. SUMMARY OF CONCLUSIONS (1 screen)

VII. ACKNOWLEDGEMENTS (1 screen)

PRESENTATION SUMMARY:

- Total of 40 screens.
- Disappearing and reappearing side bar.
- Both structural and electrical breadths are planned on being presented, but only the electrical will be included if time is limited.